

Abstract

The invention relates to a method, which is used to produce sets of control data for the production of metallic and/or non-metallic products 2, 21 by free-form sintering and/or melting by means of a high-energy beam (8), in particular a laser beam or electron beam, whereby a product 2, 21 is built up, layer by layer 12 to 15, 20, 22, out of a material 6 that is to be spread out in layers, by means of said beam 8, which is guided with the help of a control data set, whereby the method comprises the steps of loading 23 a product target geometry data set that represents the target geometry of the product to be produced and of generating 25 the control data set on the basis of the product target geometry data set. To improve the dimensional accuracy, this method comprises the additional steps of determining 24 a compensation data set and/or a compensation function to compensate for manufacturing-related effects caused by the sintering and/or melting and of combining 25 the compensation data set with and/or applying the compensation function to the product target geometry data set to generate the control data set.

The invention further relates to a corresponding device (11) to carry out said type of method as well as a correspondingly controlled apparatus (1) for production of said type of products 2, 21.

[Figure 7]